



QFW 3763

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Shuichi Takayama et al.

Group Art Unit: 3763

Examiner: Unknown

Serial No.: 10/559,742

Filed: May 24, 2006

For: INTEGRATED MICROFLUIDIC SPERM ISOLATION  
AND INSEMINATION DEVICE

Attorney Docket No.: UOM 0300 PUSA

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. § 1.97(b)**

Mail Stop Amendment  
Commissioner for Patents  
U.S. Patent & Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56 and §§ 1.97-1.98, the references listed and identified on the attached Forms PTO/SB08A and/or SB08B are being submitted herewith for consideration by the Examiner. This statement is being filed in accordance with 37 C.F.R. § 1.97(b).

While this Statement is being filed in compliance with the duty of disclosure, citation of the listed references is not to be construed as an admission that any of the references are "material" as defined under 37 C.F.R. § 1.56(b).

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8 (FIRST CLASS MAIL)**

I hereby certify that this paper, including all enclosures referred to herein, is being deposited with the United States Postal Service as first-class mail, postage pre-paid, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, U.S. Patent & Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on:

12/12/2006


Date of Deposit

William G. Conger  
Name of Person Signing

Signature

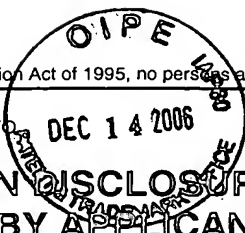
No copies of the listed U.S. patent references or the listed U.S. patent application publication references have been included herewith pursuant to 37 C.F.R. § 1.98(a)(2). All other references have been provided as required. Consideration and entry into the record of the listed references is respectfully requested.

Respectfully submitted,  
**Shuichi Takayama et al.**

By:   
William G. Conger  
Reg. No. 31,209  
Attorney/Agent for Applicant

Date: December 12, 2000

**BROOKS KUSHMAN P.C.**  
1000 Town Center, 22nd Floor  
Southfield, MI 48075-1238  
Phone: 248-358-4400  
Fax: 248-358-3351



Substitute for Form 1449A/PTC

*(use as many sheets as necessary)*

**Complete if Known**

<b>Application Number</b>	10/559,742
<b>Filing Date</b>	May 24, 2006
<b>First Named Inventor</b>	Shuichi Takayma et al.
Group Art Unit	3763
Examiner Name	Unknown
Attorney Docket Number	UOM 0300 PUSA

[illegible][illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/559,742	
			Filing Date	May 24, 2006	
			First Named Inventor	Shuichi Takayama et al.	
			Group Art Unit	3763	
Examiner Name	Unknown				
Sheet	2	of	2	Attorney Docket Number	UOM 0300 PUSA

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		Schuster, et al., "Isolation of Motile Sperm From Semen Samples Using Microfluidics", REPROD. BIOMED. ONLINE 7, 75 - 81.	
		D.C. Duffy et al., "Rapid Prototyping of Microfluidic Systems in Poly(dimethylsiloxane)," ANALYTICAL CHEMISTRY 70, 4974-4984 (1998).	
		J.R. Anderson et al., ANALYTICAL CHEMISTRY 72, 3158-64 (2000);	
		M.A. Unger et al., SCIENCE 288, 113-16 (2000);	
		J.C. McDonald, et al, "Poly(dimethylsiloxane) as a material for fabricating microfluidic devices," ACCOUNTS OF CHEMICAL RESEARCH, 35, 491-99.	
		L. Martynova, et al, "Fabrication of Plastic Microfluidic Channels by Imprinting Methods," ANALYTICAL CHEMISTRY 69, 4783-4789.	
		Beebe et al., "Microfluidic Technology for Assisted Reproduction," THERIOGENOLOGY, 57 125-135 (2002).	
		S. Nonaka et al., "Determination of Left-Right Patterning of the Mouse Embryo by Artificial Nodal Flow," NATURE, 418, pp. 96-99, July, 2002.	
		Cho, Schuster, Zhu, Chang, Smith, Takayama: "Paaively driven integrated microfluidic system for separation of motile sperm" ANALYTICAL CHEMISTRY, Vol. 75, No. 7, 1 April 2003 (2003-04-01), pages 1671-1675,	
		Ronald S. Suh, nandita Phadke, Dana A. Ohl, Shuichi Takayama, Gary Smith, "Rethinking gamete/embryo isolation and culture with microfluidics", HUMAN REPRODUCTION UPDATE, Vol. 9, No. 5, European Society of Human Reproduction and Embryology 2003; Sept. - October 2003, pps. 451-461	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.